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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
PRANGE, SHARON M	
ART UNIT	PAPER NUMBER
3728	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/558,845	FERGUSON, PATRICK	
	Examiner	Art Unit	
	SHARON M. PRANGE	3728	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/30/07, 7/5/07, 12/27/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 does not clearly and positively specify the structure which goes to make up the device. There is no transitional phrase (such as comprising or consisting) after a preamble, and then a clear recitation of the elements which make up the structure of the claimed device. The claim should be modified to clearly include a preamble, transitional phrase, and a recitation of the elements which make up the structure.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber et al. (US Patent No. 5,829,171), herein Weber, in view of Yoneyama et al. (JP-6147686), herein Yoneyama.

Weber discloses a heater element (heating element 60) for use in an insole which is formed by etching. The pattern of the heating element is selected so that a first part provides a different heat output than a second part (Fig. 8). A thermal protection device (thermocouple 65) provides temperature control of the heater element. The heater element has termination pads (plug tab 64) for connection to a control system (plug 68). The heater element is laminated with a layer of insole face fabric (top cover layer 42) and a backing layer (layer 26). The face fabric is attached to the heater element by a thermoplastic web (thermoplastic material layer 24). (column 2, lines 62-65; column 5, lines 1-7, 43-46; column 6, lines 21-34; Fig. 3, 8)

Weber does not disclose that the heater element is formed of a metallised fabric.

Yoneyama teaches that an electrical circuit can be formed of a porous flexible metallised fabric which is etched to create the circuit pattern. Polyester threads are coated with a metal, such as nickel, and then etched to form the desired conductive pattern (page 3, paragraph 4). It would have been obvious to one of ordinary skill in the art at the time of the invention to have used a metallised fabric, as taught by Yoneyama, as the heater element of the insole of Weber, as this would be a simple substitution of

one type etched circuit for another, with the predictable result of providing an element which is sufficiently flexible to be placed in an insole.

Regarding claim 5, Weber does not disclose that the thermal protection device is a thermistor. Official Notice is taken that it is old and conventional to use a thermistor to monitor and control temperature in an electrical circuit. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the Official Notice to have used a thermistor as the thermal protection device.

Regarding claim 16, the combination of Weber and Yoneyama discloses the general conditions of the claimed invention except for the express disclosure of the thickness of the insole. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the thickness of the insole between 0.1-1.0 mm, since the claimed values are merely an optimum or workable range. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weber and Yoneyama, as applied to claims 1-17, further in view of Bondy (US Patent No. 4,665,301).

Weber and Yoneyama do not disclose that the insole may be trimmed to several possible shapes or sizes.

Bondy teaches that a heated insole may be trimmed to fit the footwear in which it is to be used (column 2, lines 41-45; Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to have made the insole so that it could be trimmed, as taught by Bondy, in order to allow one size insole to be custom fitted to the footwear in which it will be used.

7. Claims 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber and Yoneyama, as applied to claims 1-17, further in view of Oakley (US Patent No. 4,864,740) and Mathiowitz et al. (US Patent No. 6,143,211), herein Mathiowitz.

Weber and Yoneyama do not disclose heat-activatable agents in the insole.

Oakley teaches providing antimicrobial agents or fragrances in a shoe insole in order to enhance the cleanliness and freshness of the shoe (column 2, lines 61-68; column 2, lines 1-8). It would have been obvious to one of ordinary skill in art at the time of the invention to have included an antimicrobial agent or fragrance to the insole, as taught by Oaley, in order to enhance the cleanliness and freshness of the shoe.

Oakley does not teach that the antimicrobial agent or fragrance is in the form of microcapsules.

Mathiowitz teaches that agents such as fragrance can be stored and delivered in microcapsules which release the agent in response to heat. The release rate may be controlled by the size of the capsule (column 1, lines 12-23). It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the

antimicrobial agent or fragrance in the form of heat activated microcapsules so that the release of the agent could be controlled.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHARON M. PRANGE whose telephone number is (571)270-5280. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mickey Yu can be reached on (571) 272-4562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. M. P./ 9/12/09 /JILA M MOHANDESI/

Examiner, Art Unit 3728

Primary Examiner, Art Unit 3728